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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,504	02/11/2002	Bill Christensen	069p2	9093
24320	7590	10/27/2003	EXAMINER	
Paul Smith Intellectual Property Law 330-1508 West Broadway Vancouver, BC V6JIW8 CANADA			DAVIS, OCTAVIA L	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,504

Applicant(s)

CHRISTENSEN ET AL.

Examiner

Octavia Davis

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 3.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 9, 10, 15, 16 and 18-20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8, 24, 25, 27 and 28 is/are allowed.
- 6) ☒ Claim(s) 1, 11-14, 17, 21-23, 26 and 29-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 11, 23, 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Harada et al.

Regarding claims 1, 11, 23, 26 and 29, Harada et al disclose a load cell and load detecting apparatus comprising a plate 33 of which includes bolt-holes 34 in each of its corners and strain gauges SG1 - SG8 attached to the plate (See Figs. 1A, 1B and 6) (See Cols. 5 and 6, lines 15 - 45).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2855

4. Claims 12 - 14, 17, 21, 22 and 30 - 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al in view of Suzuki et al and Barnett et al.

Regarding claims 12 - 14 and 30 - 34, Harada et al disclose that the strain gages constitute a Wheatstone bridge configuration (See Fig. 2) (See Col. 4, lines 59 - 65) but does not disclose a cover mounted on the plate to cover a plurality of standoffs, the circuit board and the strain gauges, the cover having corners which lie along lines bisecting the straight sides of the plate. However, Suzuki et al disclose a load cell balance comprising a plate 3 of which includes strain gauges 34 - 37 forming a bridge circuit 32, the gauges being connected to a board 26 via a spacer 29 interposed therebetween and a cover 49 covering the spacer, board and strain gauges (See Fig. 4) (See Cols. 3 - 5, lines 22 - 67, 1 - 26 and 54 - 64).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Harada et al according to the teachings of Suzuki et al for the purpose of, providing a firm and stable connection of electric wires to strain gauges (See Suzuki et al, Col. 5, lines 57 - 64).

Regarding claims 17, 21 and 22, Harada et al does not disclose a digital potentiometer in parallel with the bridge. However, Barnett et al disclose a strain measuring transducer comprising strain gauges 9 - 12 forming a Wheatstone bridge which is connected to an amplifier circuit of whose output passes through a current meter of which is calibrated to represent the load on the structure (See Col. 3, lines 61 - 65).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Harada et al according to the teachings of Barnett et al for the purpose of, providing an indication of the strain in the transducer and in the structure (See Barnett et al, Col. 4, lines 1 - 13).

Allowable Subject Matter

6. Claims 2 - 8, 24, 25, 27 and 28 are allowed.

The examiner would like to bring to the applicant's attention the suggestion to replace "patter" with "pattern" in each one of claims 24, 25, 27 and 28, lines 12 and 14 respectively.

Response to Arguments

7. Applicant's arguments filed 8/21/03 have been fully considered but they are not persuasive. In response to applicant's argument that the references do not show "strain gages situated on the plate", it is the examiner's position that in Harada et al, the strain gages SG1 – SG8 are attached, secured or rigidly associated to the plate 33 in that the strain gages are stuck on a lower surface 18a of a strain occurrence portion 18, a body 11, of which includes a lower end surface 11b, is fixed to the plate 33, thus the strain gages are fixed to the plate (See Figs. 1A, 1B and 6) and the reference still stands.

Art Unit: 2855

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication should be directed to Examiner Octavia Davis at telephone number (703) 306 - 5896. The examiner can normally be reached on Monday - Thursdays (9:00 - 5:00), Fridays off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on (703) 305 - 4816. The fax phone number for the organization where this application or proceeding is assigned is (703) 746 - 4409.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0956.

DD

OD/2855

10/21/03


EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
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